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09/507,022	02/18/2000	Jean Margaret Aschenbrenner	501.315US01	8152
7590 06/15/2004			EXAMINER	
David W. Lynch			PHAM, THIERRY L	
CRAWFORD MAUNU PLLC 1270 Northland Drive			ART UNIT	PAPER NUMBER
Suite 390			2624	11
Mendota Heights, MN 55120			DATE MAILED: 06/15/2004	, 4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
•	09/507,022	ASCHENBRENNER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Thierry L Pham	2624				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a ply within the statutory minimum of the will apply and will expire SIX (6) MO te, cause the application to become	a reply be timely filed  irty (30) days will be considered timely.  DNTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a)⊠ This action is <b>FINAL</b> . 2b)□ Thi	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)  Claim(s) 1-47 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-47 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.						
Application Papers		·				
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	Paper No	Summary (PTO-413) o(s)/Mail Date Informal Patent Application (PTO-152) 				

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## **DETAILED ACTION**

1. This action is responsive to the following communication: an Amendment filed on 4/16/04.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 1. Claims 1-6, 8-13, 15-20, 22-24, 34-36, 38-43, 45-47 are rejected under 35 U.S.C. 102(e) as being anticipated by Zandee et al (U.S. Patent No. 5872895).

Regarding claim 1, Zandee discloses a data structure (printer driver incorporated within the computer as shown in fig. 1 for providing rendering intents for the document/images, col. 3, lines 50-67) embodied in a tangible medium for providing object level management of a document datastream in a print system using tagged secondary resources (printer driver provides an user interface that allowing users to tag rendering intents control data (secondary resources data) for the objects within the image, col. 5, lines 39-67 and col. 6, lines 1-67), the data structure including at least one mapping structure (i.e. the printer driver maps a selected rendering intents control data for a particular objects within the image (i.e. business graphics), col. 5, lines 38-67 to col. 6, lines 1-67) for identifying rendering control data as a secondary resource (the printer driver also identifies whether or not the rendering intents control data for the objects has a profile associated with it, col. 6, lines 34-67) and at least one include object (i.e. texts, graphics, charts and etc, col. 3, lines 12-25 and col. 6, lines 50-67) structure for referencing the rendering control data.

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Regarding claim 2, Zandee further discloses a data structure, wherein a plurality of mapping structures (gray tone reproduction curve information and the tristimulus values for red, green, and blue, Fig. 3A & 3B, col. 4, lines 46-66) are provided.

Regarding claim 3, Zandee further discloses a data structure, wherein a plurality of include object structures (Fig. 3A and 3B, col. 4, lines 38-66) to an object reference the identified rendering control data (color profile matching, col. 4, lines 38-67 and col. 7, lines 10-20).

Regarding claim 4, Zandee further discloses a data structure, wherein a plurality of include object structures (Fig. 3A and 3B, col. 4, lines 30-66) to an object are provided for referencing identified rendering control data (color profile matching, col. 4, lines 38-67 and col. 7, lines 10-20).

Regarding claim 5, Zandee further discloses a data structure, wherein the rendering control data comprises source calibration parameters (device's color space, tonal reproduction curves, col. 4, lines 30-45).

Regarding claim 6, Zandee further discloses a data structure, wherein the source calibration parameters comprise a color profile (color matching, col. 4, lines 46-53).

Regarding claim 8, Zandee further discloses a data structure, wherein the rendering control data comprises text rendering parameters (documents, col. 6, lines 50-60).

Regarding claim 9, Zandee further discloses a data structure, wherein the rendering control data comprises vector graphic rendering parameters (photographic rendering intent, col. 5, lines 5-19).

Regarding claim 10, Zandee further discloses a data structure, wherein the rendering control data comprises image rendering parameters (matching color with a photographic rendering intent means the colors are matched as close as possible to the original colors while

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preserving the overall tone of the image, col. 5, lines 5-20).

Regarding claim 11, Zandee discloses a method for providing object level management using tagged secondary resources, comprising:

- (1) mapping rendering control data (Fig. 3A & 3B, col. col. 4, lines 61-66) for at least one object as a secondary resource (color matching, col. 4, line 46-53);
- (2) including at least one include structures (Fig. 2) for the at least one object (text, col. 3, lines 12-24) that references the mapped rendering control data;
- (3) printing a page (col. 3, lines 62-63, and see printer on Fig. 1) containing the at least one object (image, col. 3, line 63), the at least one object on the page being rendered according to the mapped rendering control data for the at least one object.

Regarding claim 12, Zandee discloses a method for providing object level management using tagged secondary resources, wherein the rendering control data comprises source calibration parameters (device's color space, tonal reproduction curves, col. 4, lines 30-45).

Regarding claim 13, Zandee discloses a method for providing object level management using tagged secondary resources, wherein the source calibration parameters comprise a color profile (color matching, col. 4, lines 46-53).

Regarding claim 15, Zandee discloses a method for providing object level management using tagged secondary resources, wherein the rendering control data comprises text rendering parameters (documents, col. 6, lines 50-60).

Regarding claim 16, Zandee discloses a method for providing object level management using tagged secondary resources, wherein the rendering control data comprises vector graphic rendering parameters (photographic rendering intent, col. 5, lines 5-19).

Regarding claim 17, Zandee discloses a method for providing object level management using tagged secondary resources, wherein the rendering control data comprises image rendering

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parameters (matching color with a photographic rendering intent means the colors are matched as close as possible to the original colors while preserving the overall tone of the image, col. 5, lines 5-20).

Regarding claim 18, Zandee discloses a method for providing object level management for a page using tagged secondary resources, comprising:

- (1) determining (col. 5, lines 39-45) whether rendering control data for an object is mapped;
- (2) making the rendering control data for the object available in the printer (device's color space, tonal reproduction curves, col. 4, lines 30-45 and col. 8, lines 32-52).
- (3) including the object that references the mapped rendering control data for the object (Fig. 3A & 3B, col. 4, lines 46-66).
- (4) determining whether additional rendering control data is to be mapped (Fig. 3A & 3B, col. 4, lines 61-66 and col. 7, lines 2-7);
- (5) making additional rendering control data for additional objects available in the printer (printer, Fig. 1) and including the additional objects that reference the additionally mapped rendering control data for the additional objects when it is determined that additional rendering control data is to be mapped (Fig. 3A & 3B, col. 4, lines 6-66);
- (6) rendering objects in page (images and documents, col. 5, lines 5-37) according to mapped rendering control data for the objects; and
- (7) printing the page (prints by the printer, Fig. 1, col. 3, lines 62-63).

Regarding claim 19, Zandee discloses a method for providing object level management for a page using tagged secondary resources, wherein the rendering control data comprises source calibration parameters (device's color space, tonal reproduction curves, col. 4, lines 30-45).

Regarding claim 20, Zandee discloses a method for providing object level management for a page using tagged secondary resources, wherein the source calibration parameters comprise a color profile (color matching, col. 4, lines 46-53).

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Regarding claim 22, Zandee discloses a method for providing object level management for a page using tagged secondary resources, wherein the rendering control data comprises text rendering parameters (documents, col. 6, lines 50-60).

Regarding claim 23, Zandee discloses a method for providing object level management for a page using tagged secondary resources, wherein the rendering control data comprises vector graphic rendering parameters (photographic rendering intent, col. 5, lines 5-19).

Regarding claim 24, Zandee discloses a method for providing object level management for a page using tagged secondary resources, wherein the rendering control data comprises image rendering parameters (matching color with a photographic rendering intent means the colors are matched as close as possible to the original colors while preserving the overall tone of the image, col. 5, lines 5-20).

Regarding claim 34, Zandee discloses an article of manufacture comprising a program storage medium (temporary disk file, col. 3, lines 53-55) readable by a computer, the medium tangibly embodying one or more programs of instructions executable by the computer to perform a method for providing object level management for a page, the method comprising:

- (1) mapping rendering control data (Fig. 3A & 3B, col. col. 4, lines 61-66) for at least one object as a secondary resource (color matching, col. 4, line 46-53);
- (2) including at least one include structures (Fig. 2) for the at least one object (text, col. 3, lines 12-24) that references the mapped rendering control data;
- (3) printing a page (col. 3, lines 62-63, and see printer on Fig. 1) containing the at least one object (image, col. 3, line 63), the at least one object on the page being rendered according to the mapped rendering control data for the at least one object.

Regarding claim 35, Zandee further discloses the article of manufacture of claim 34, wherein the rendering control data comprises source calibration parameters (device's color space, tonal reproduction curves, col. 4, lines 30-45).

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Regarding claim 36, Zandee further discloses the article of manufacture of claim 35, wherein the source calibration parameters comprise a color profile (color matching, col. 4, lines 46-53).

Regarding claim 38, Zandee further discloses the article of manufacture of claim 34, wherein the rendering control data comprises text rendering parameters (documents, col. 6, lines 50-60).

Regarding claim 39, Zandee further discloses the article of manufacture of claim 34, wherein the rendering control data comprises vector graphic rendering parameters (photographic rendering intent, col. 5, lines 5-19).

Regarding claim 40, Zandee further discloses the article of manufacture of claim 34, wherein the rendering control data comprises image rendering parameters (matching color with a photographic rendering intent means the colors are matched as close as possible to the original colors while preserving the overall tone of the image, col. 5, lines 5-20).

Regarding claim 41, Zandee discloses an article of manufacture comprising a program storage medium (temporary disk file, col. 3, lines 53-55) readable by a computer, the medium tangibly embodying one or more programs of instructions executable by the computer to perform a method for providing object level management for a page, the method comprising:

- (1) determining (col. 5, lines 39-45) whether rendering control data for an object is mapped;
- (2) making the rendering control data for the object available in the printer (device's color space, tonal reproduction curves, col. 4, lines 30-45 and col. 8, lines 32-52).
- (3) including the object that references the mapped rendering control data for the object (Fig. 3A & 3B, col. 4, lines 46-66).
- (4) determining whether additional rendering control data is to be mapped (Fig. 3A & 3B, col. 4, lines 61-66 and col. 7, lines 2-7);

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(5) making additional rendering control data for additional objects available in the printer (printer, Fig. 1) and including the additional objects that reference the additionally mapped rendering control data for the additional objects when it is determined that additional rendering control data is to be mapped (Fig. 3A & 3B, col. 4, lines 6-66);

- (6) rendering objects in page (images and documents, col. 5, lines 5-37) according to mapped rendering control data for the objects; and
- (7) printing the page (prints by the printer, Fig. 1, col. 3, lines 62-63).

Regarding claim 42, Zandee further discloses the article of manufacture of claim 41, wherein the rendering control data comprises source calibration parameters (device's color space, tonal reproduction curves, col. 4, lines 30-45).

Regarding claim 43, Zandee further discloses the article of manufacture of claim 42, wherein the source calibration parameters comprise a color profile (color matching, col. 4, lines 46-53).

Regarding claim 45, Zandee further discloses the article of manufacture of claim 41, wherein the rendering control data comprises text rendering parameters (documents, col. 6, lines 50-60).

Regarding claim 46, Zandee further discloses the article of manufacture of claim 41, wherein the rendering control data comprises vector graphic rendering parameters (photographic rendering intent, col. 5, lines 5-19).

Regarding claim 47, Zandee further discloses the article of manufacture of claim 41, wherein the rendering control data comprises image rendering parameters (matching color with a photographic rendering intent means the colors are matched as close as possible to the original colors while preserving the overall tone of the image, col. 5, lines 5-20).

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38. Claims 25-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al (U.S. Patent No. 5704021).

Regarding claim 25, Smith discloses a system for providing object level management for a page, comprising:

a print server (host computer, col. 3, lines 10-17) for receiving an application datastream defining a document containing objects for printing and creating a printer datastream that is specific to a destination printer engine (inkjet printer, col. 6, lines 31-35) in order to integrate with the printer's specific capabilities and command set; and

a control unit (printer's control, col. 6, lines 15-23) for cache objects, the control unit further comprising a raster image processor (raster printer, col. 3, lines 60-67) for rendering object (halftoning, col. 8, Table 2) according to commands provided by the print server in the printer datastream, and

wherein the application datastream maps at least one of rendering control data (halftoning, Fig. 6, col. 5, lines 51-67) as a secondary resource and includes at least on object that references the at least one mapped set of rendering control data based upon a data structure (raster data, col. 3, lines 1-9) in the application datastream that tags rendering control to objects.

Regarding claim 26, Smith further discloses the system of claim 25, wherein the secondary resource is shipped resident (ink, col. 6, lines 36-42) in the printer.

Regarding claim 27, Smith further discloses the system of claim 25, wherein the secondary resource (color control rendering options, col. 5, lines 51-67) is downloaded by the print server based upon the mapping when the secondary resource is not resident.

Regarding claim 28, Smith further discloses the system of claim 25, wherein the rendering control data comprises source calibration parameters (Calibrate screen, Fig. 5).

Regarding claim 29, Smith further discloses the system of claim 28, wherein the source calibration parameters comprise a color profile (Print Color Control, Fig. 5).

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Regarding claim 30, Smith further discloses the system of claim 28, wherein the source calibration parameters comprise halftoning parameters (halftoning, Fig. 5).

Regarding claim 31, Smith further discloses the system of claim 25, wherein the rendering control data comprises text rendering parameters (color text, Fig. 7, col. 4, lines 28-37).

Regarding claim 32, Smith further discloses the system of claim 25, wherein the rendering control data comprises vector graphic rendering parameters (color photo images, Fig. 7 and color vector space, Fig. 9, col. 3, lines 1-10).

Rendering claim 33, Smith further discloses the system of claim 25, wherein the rendering control data comprises image rendering parameters (print photo as halftone color image, Fig. 6).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 7, 14, 21, 37, 44 are rejected under 103(a) as being unpatentable over Zandee et al (U.S. Patent No. 5872895) as applied to claim 12 above, and view of Smith et al (U.S. Patent No. 5704021).

Regarding claim 7, Zandee discloses a system for providing object level management with rendering control data, but does not include the source calibration parameters comprise

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## halftoning parameters.

Smith, in the same field of endeavor for print rendering control data, discloses the source calibration parameters comprise halftoning parameters (Fig. 5 & Fig. 7, col. 3, lines 1-9 and col. 10, lines 38-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Zandee's print rendering intent control data as per teachings of Smith because of the following reasons: (1) to provide optimum color matching and to increased flexibility (Zandee, col. 6, lines 50-61); thereby, increasing the quality of printed images; (2) to provide best quality output image (Smith, col. 11, lines 20-46).

It would have been obvious to combine Smith with Zandee to obtain the invention as specified in claim 7.

Regarding claims 14, 21, 37, and 44 recite the limitations that are included in claim 7; therefore, claims 14, 21, 37, and 44 are rejected for the same rationale/basis as described in claim 7 above.

## Response to Arguments

- 5. Applicant's arguments, see page 11, lines 3-7, filed 4/16/04, with respect to claims 1-10 have been fully considered and are persuasive. The 35 U.S.C. 101 rejection of claims 1-10 has been withdrawn.
- 6. Applicant's arguments filed 4/16/04 have been fully considered but they are not persuasive.

Regarding claim 1, applicants argued the prior art does not teach at least one mapping structure for identifying rendering control data as a secondary resource and at least one include object structure for referencing the rendering control data.

In Response: Zandee discloses at least one mapping structure (the print driver maps a selected rendering intents control data for a particular objects within the image (i.e. business graphics), col. 5, lines 38-67 to col. 6, lines 1-67) for identifying rendering control data as a

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secondary resource (the printer driver also identifies whether or not the rendering intent control data for the objects has a profile associated with it, col. 6, lines 34-67) and at least one include object (i.e. texts, graphics, charts and etc, col. 3, lines 12-25 and col. 6, lines 50-67) structure for referencing the rendering control data.

## Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

GABRIEL GARCIA PRIMARY EXAMINER